

## **Abstract**

A trigger function display system and methodology for trigger definition development in a signal measurement system having a graphical user interface. The system displays a plurality of graphically selectable icons and an associated protocol profile window. The protocol profile window includes at least a protocol descriptor field and a protocol editors field. The user inputs data into the protocol editors field which causes the system to automatically construct a bit sequence utilizing a plurality of event definitions stored in memory. The event definitions are two bit blocks resulting from the parsing of protocol definition text files. The bit sequence is used to then construct a series of trigger primitives. An optimizing routine is used to consolidate consecutive multiple occurrences of identical bit patterns in the bit sequence into single trigger primitives.